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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,978	04/20/2005	Sang-Ik Lee	P-0752	5794
34610 7590 02/27/2009 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200				
EXAMINER				
ALI, MOHAMMAD M				
ART UNIT		PAPER NUMBER		
3744				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/531,978

**Applicant(s)**

LEE ET AL.

**Examiner**

MOHAMMAD M. ALI

**Art Unit**

3744

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 20-25 is/are rejected.
- 7) ☒ Claim(s) 2-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-856)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. (U. S. Pat. No. 5,918,480), in view of Kronenberger et al. (U. S. Pat. No. 4,013,434).

Fig. 27 of Nagata et al. discloses a vegetable room (3, and see col. 1, ln. 24) for a refrigerator comprising: a vegetable box (7, and see col. 1, ln. 29 and 30) disposed inside a refrigerator in which a cooling air supply unit (see col.1, ln. 51 and 52) is provided and, having a receptacle space opened upwardly; a box cover (9, and see col. 1, ln. 34) and having a cooling air ventilating hole (10, and see col. 1, ln. 38) formed at one side thereof; wherein additional air ventilating holes can be placed on the fruit

container (col. 3, ln. 51-55); a cover support unit (11, and see col. 1, ln. 39) interposed between the box cover and the shelf. It is noted that Nagata et al. does not specifically disclose a plurality of shelves, a plurality of opening and closing members; and an operating unit.

However, Figs. 1 and 2 of Kronenberger et al. teach a plurality of shelves (19, and see col. 2, ln. 22), a plurality of opening and closing members (72 and 74, and see col. 3, ln. 19-21); and an operating unit (78, and 80-82, and see col. 3, ln. 40 and 41). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Nagata et al. with the teachings of Kronenberger et al. to obtain a device to provide a vegetable room for a refrigerator that is capable of maintaining food items stored in a vegetable box fresh regardless of environmental conditions outside a refrigerator.

4. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. in view of Kronenberger et al. as applied to claim 1 above, and further in view of Kim et al. (U. S. Pat. No. 6,367,276 B1).

Nagata et al. and Kronenberger et al. disclose a vegetable room as described above. It is noted that Nagata et al. and Kronenberger et al. do not specifically disclose a plurality of ribs formed at the bottom of the box cover with a certain height and with a certain width; wherein the ribs have a grid form.

However, Fig. 3 of Kim et al. teaches a plurality of ribs formed at the bottom of the box cover with a certain height and with a certain width (210, and see col. 4, ln. 17) (as per claim 20); wherein the ribs have a grid form (see col. 4, ln. 28) (as per claim 21). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Nagata et al. and Kronenberger et al. with the teachings of Kim et al. to obtain a device to collect moisture existing in the vegetable box and prevent it from being discharged outwardly from the vegetable box.

5. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. in view of Kronenberger et al., and further in view of Chang (U. S. Pat. No. 6,070,419).

Nagata et al. and Kronenberger et al. disclose a vegetable room. It is noted that Nagata et al. and Kronenberger et al. do not specifically disclose a cooling air discharge hole of a cooling air discharge duct positioned between the box cover and the shelf at the rear side of the refrigerator; wherein a nozzle is provided at a front side of the cooling air discharge hole, of which sectional area is diminished as it goes from a rear side to a front side; wherein the nozzle is provided to be positioned at a rear side of the rearmost cooling air ventilating hole.

However, Figs. 6 and 9B of Chang teach a cooling air discharge hole (52) of a cooling air discharge duct (3) is positioned between the box cover and the shelf at the rear side of the refrigerator, (as per claim 22); wherein a nozzle (51) is provided at a

front side of the cooling air discharge hole, of which sectional area is diminished as it goes from a rear side to a front side, (as per claim 23); wherein the nozzle is provided to be positioned at a rear side of the rearmost cooling air ventilating hole, (as per claim 24), (see col. 4, ln. 33-36 and 49 and 50). Hence, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the apparatus of Nagata et al. and Kronenberger et al. with the teachings of Chang to obtain a device which a cooling air discharge hole of a cooling air discharge duct mounted at a rear side of a refrigerator so that cooling air can be introduced between the box cover and the shelf, and a nozzle with a sectional area diminished as it goes from the rear side to the front side in order to increase the discharge speed of cooling air.

***Allowable Subject Matter***

6. Claims 2-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter: the examiner notes that in regard to claim 2, the feature of the cover support unit formed eccentric toward the front side on the basis of the center of the box cover was not found in a search of the prior art of record; in regard to claim 6, the feature of the cooling air ventilating hole formed perpendicular to the air flow was not found in a

search of the prior art of record; in regard to claim 7, the feature of the opening and closing member comprising first and second members rotatably supported at an inner side of the first and second ventilating hole was not found in a search of the prior art of record.

### ***Response to Arguments***

Applicant's arguments filed 01/12/09 have been fully considered but they are not persuasive. The Applicant argues that neither Nagata nor Kronenberger disclose or suggest a box cover having a plurality of cool air ventilating holes formed therein.", as recited in independent claim 1.

The Examiner disagrees. Nagata et al disclose apertures (19) which are plurality of apertures as can be shown in Fig 2 with lid member 19 for the for vegetable box 18 as shown in Fig. 1. Although the apertures 19a are covered with moisture permeable film that does not overcome the claimed limitations because the film allows to pass moisture and thus it allows to pass air through it. Therefore, the Applicant argument that Neither Nagata et al not Kronenberger disclose or suggest a cover having plurality of cool air venting holes is not correct.

The Applicant further argues that Kronenberger does not disclose a plurality of cooling air venting holes on a box cover. This an obvious type of rejection and does not need to teach a single subject matter by each of the references. In this regard it is stated that one cannot show non obviousness by attacking references individually where the rejections are based on combination of references. See Inre Keller, 642 F.2d

413,208 USPQ 871 (CCPA 1981), Inre Merk & Co; 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Therefore the arguments of the Applicant are not correct and thus rejections are ok.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MOHAMMAD M. ALI** whose telephone number is (571)272-4806. The examiner can normally be reached on maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad M Ali/  
Primary Examiner, Art Unit 3744